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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,053	07/06/2005	Akira Nakao	074129-0515	2871
7590 Stephen B Maebius Foley & Lardner Suite 500 3000 K Street NW Washington, DC 20007-5109		02/07/2008	EXAMINER SIMMONS, CHRIS E	
			ART UNIT 1612	PAPER NUMBER
			MAIL DATE 02/07/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,053	Applicant(s) NAKAO ET AL.	
	Examiner Chris E. Simmons	Art Unit 1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 7-17, and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Status of the claims: Receipt of the RCE and amendment filed on 11/01/2007 is acknowledged. Accordingly, claim 1 is amended. Claims 1-2, 7-17, and 19 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

are
Claims 1-2 rejected under 35 U.S.C. 102(b) as being anticipated by JP 0558861.
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The reference teaches a toothpaste composition comprising 0.2-10% wt. microcrystalline cellulose¹ with a particle size in the range of 0.3-6 micrometers. It teaches that such composition has a smoother property than those with bigger size particles (§ 0017). Also a thixotropic property is exhibited allowing good dispersion of the polisher and providing easy squeezing out from the tube container and excellent shape retention on the toothbrush. The characteristics were found to be stable to temperature and ion concentration changes; the composition did not cause any sandy feeling inside the mouth and rinsing was found to be excellent (§ 0010).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

¹ DATABASE CaPlus; Accession No.; 1993:260722 - Indicates the cellulose material referred throughout the JP 05058861 patent is the material with CAS registry number 9004-34-6 (i.e., microcrystalline cellulose).

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 7-17, and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO 95/34275.

This rejection is maintained. Applicant argues that the reference prefers a size of about 20 micrometers to about 70 micrometers. Applicant further argues that instant invention is contained for providing to an oral composition a better shape-holding ability and dispersibility in an oral cavity and has a relatively low range for accomplishing this purpose. Applicant references instant specification filed on 07/06/2005 to show that when the diameter of the microcrystalline cellulose is above 10 micrometers, dispersibility in the oral cavity is deteriorated.

Applicant's remarks have been fully considered, however have not been deemed persuasive. Examiner agrees with Applicant's remarks filed on 11/01/2007 that the prior art discloses cellulose having a particle size of from about 1 micrometer to 350

micrometer (pg. 4, 2nd paragraph). This overlaps that newly added limitation in instant claim 1, "microcrystalline cellulose having an average particle diameter of equal to or smaller than 10 micrometers". However, the Examiner disagrees with Applicant's statement that one of skill in the art would not have been motivated to arrive at the present invention and use microcrystalline cellulose at a relatively low particle size. The reference clearly discloses that one skilled in the art has the option to choose a particle size that overlaps the present invention's claimed particle size of 10 micrometers or less.

Claims 1, 2, 7-17, and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO 95/34275 in view of JP 0558861.

The references disclosures are outlined above or in a prior office action.

The primary reference does not expressly teach a particle size at 10 microns or lower.

The secondary reference does not expressly teach the composition further comprising a betaine or a cationic microbial agent.

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Te skilled artisan would have found it obvious at the time of the invention to make
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the composition suggested be the primary reference being motivated by the desire to make a smooth creamy composition with good dispersion and shape retention.

Conclusion

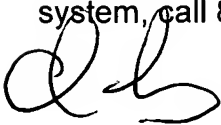
No claims are allowed.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris E. Simmons whose telephone number is (571) 272-9065. The examiner can normally be reached on Monday - Friday from 7:30 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Krass can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

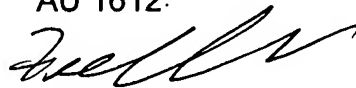
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Chris Simmons
Patent Examiner
AU 1612

January 29, 2008

Frederick Krass
Supervisory Patent Examiner
AU 1612.



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